

PATENT

Attorney Docket No.: PD-N94025H  
Customer No.: 020991

a forward error corrector that is configured to receive the demodulated data stream from said demodulator and to perform forward error correction on the demodulated data stream to output a corrected data stream, said forward error corrector comprising a Viterbi soft-decision decoder, depuncture logic, a deinterleaver, and a Reed-Solomon decoder;

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a frame processor that is configured to identify frames in the corrected data stream, each frame including an address header for identifying the data stream to which the frame belongs, a data field containing data, and a checksum field, said frame processor being further configured to select frames in accordance with the address header; and

an output unit that is configured to connect said apparatus to a computing device to output to the computing device frames output by said frame processor and information for monitoring said data demodulator.

33. (New) An apparatus according to Claim 32, further comprising a power unit for providing a voltage to the low noise block element of the satellite antenna device.

34. (New) An apparatus according to Claim 32, wherein said apparatus is an adapter card.

35. (New) An apparatus according to Claim 34, wherein said output unit comprises a bus interface.

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36. (New) An apparatus according to Claim 32, wherein said output unit also outputs to the computing device information for monitoring said tuner.

37. (New) An apparatus according to Claim 32, wherein said frame processor further comprises a decryptor that is configured to decrypt the selected frames in accordance with a key, the key being determined in accordance with the address header.

38. (New) An apparatus according to Claim 37, wherein the key is determined using a smart card device.

39. (New) An apparatus according to Claim 37, wherein the key is obtained through a message received via satellite.

40. (New) An apparatus according to Claim 37, wherein said frame processor has a burned-in master key relating to the decryption, each said apparatus having a unique such master key.

41. (New) An apparatus according to Claim 37, wherein said decryptor decrypts frames on a frame-by-frame basis without buffering plural encrypted frames.

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42. (New) An apparatus according to Claim 32, wherein said frame processor discards unselected frames to prevent the unselected frames from being sent to the computing device.

43. (New) An apparatus according to Claim 32, wherein said output unit buffers the frames output by same frame processor.

44. (New) An apparatus according to Claim 43, wherein said output units interrupts the computing device to indicate that the buffered frames are ready to be retrieved.

45. (New) An apparatus comprising:  
tuning/data-demodulating/forward-error-correcting means for performing tuning, data demodulation, and forwarding error correcting upon output of a low noise block element of a satellite antenna device to output a forward-error-corrected digital data stream, said tuning/data-demodulating/forward-error-correcting comprising (a) means for downconverting the output of the low noise block element of the satellite antenna device from between 950 and 1450 MHz to an IF output, (b) means for performing data demodulation upon the IF output to obtain a digital data stream, (c) and means for performing Viterbi soft-decision decoding, depuncture logic, deinterleaving, and Reed-Solomon decoding upon the digital data stream to obtain an error corrected digital data stream;

frame processing means for identifying frames in the error corrected digital data stream, each frame including an address header for identifying the

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data stream to which the frame belongs so as to enable multiplexing of plural data streams in units of frames, a data field containing data, and a checksum field, wherein said frame processing means determines whether the address header of each frame is listed in a table of one or more addresses of interest, and decrypts the frame using a key determined in accordance with the address header if the frame is so listed and discards the frame if the frame is not so listed;

an output unit that is configured to connect said apparatus to a computing device to output to the computing device decrypted frames output by same frame processing means and information for monitoring said means for performing data demodulation.

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#### REMARKS

Favorable consideration and allowance of the subject application are respectfully solicited.

Claims 31 through 45 are pending, with Claims 31, 32, and 45 being independent. Claims 32 through 45 have been added.

#### REQUEST FOR INTERVIEW

If any questions remain, Applicant respectfully requests that the Examiner contact Applicant's representative, John T. Whelan, at (301) 428-7172.

#### CONCLUSION

Applicant submits that this application is in condition for allowance, and a Notice of Allowance is respectfully requested.